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Notice of Allowability	Application No.	Applicant(s)	
	10/040,373	BRAZHNIK ET AL.	
	Examiner	Art Unit	
	David Silver	2128	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.31	S (OR REMAINS) CLOSED ) or other appropriate comm RIGHTS. This application is	in this application. If not includ runication will be mailed in due	led course. <b>THIS</b>
1. $\boxtimes$ This communication is responsive to <u>6/20/07</u> .			
2. 🔀 The allowed claim(s) is/are <u>1-38</u> .			
<ol> <li>Acknowledgment is made of a claim for foreign priority unally all blacks blacks.</li> <li>All blacks blacks blacks blacks blacks are all all all all all all all all all al</li></ol>	re been received. The been received in Applicate been received to be a received in Applicate to be a received and the second to firm the been received and the second to firm the beautiful to firm the been received and the second to firm the beautiful to firm the beautiful to firm the beautiful to firm the beautiful the bea	ion No ed in this national stage applica	
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. A SUBSTITUTE OATH OR DECLARATION must be subn	nitted. Note the attached FX	(AMINER'S AMENDMENT or I	NOTICE OF
INFORMAL PATENT APPLICATION (PTO-152) which give			101102 07
<ul> <li>5. CORRECTED DRAWINGS ( as "replacement sheets") mu         <ul> <li>(a) including changes required by the Notice of Draftsper</li> <li>1) hereto or 2) to Paper No./Mail Date</li> <li>(b) including changes required by the attached Examiner Paper No./Mail Date</li> <li>Identifying indicla such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in</li> </ul> </li> <li>6. DEPOSIT OF and/or INFORMATION about the deport attached Examiner's comment regarding REQUIREMENT</li> </ul>	rson's Patent Drawing Revie  r's Amendment / Comment of 1.84(c)) should be written on the header according to 37 Cosit of BIOLOGICAL MA	or in the Office action of the drawings in the front (not the FR 1.121(d). TERIAL must be submitted.	
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5 ☐ Notice of	Informal Patent Application	
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	· <u>=</u>	Summary (PTO-413),	
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	Paper No	o./Mail Date s Amendment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner' 9.	FRED FERRI PRIMARY EXAM	IS NINER

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## **DETAILED ACTION**

- 1. Claims 1-28 were originally presented for Examination.
- 2. The Instant Office Action is in response to amendment filed 6/20/2007.
- 3. Claims 1-38 are currently pending in the Instant Application.

## Allowable Subject Matter

- 4. Claims 1-38 are allowed.
- 5. The following is an examiner's statement of reasons for allowance:

The art of record, individually or in combination, fails to suggest or render obvious the specific arrangement of the claimed invention as recited in the claims and disclosed in the Specification. The most relevant prior-art of record are Porumbescu (**US 6582366**), Brown et al's "The global diabetes model: user friendly version 3.0", Lehmann's "Focus on Interactive Educational Diabetes Simulators: Future possibilities" all of which have been previously submitted in a PTO-892 and the applicability of which has been established in previous Office Actions.

5.1 As per independent claims 1, 7, 10, 16, 20, 24 and their respective dependent claims, the most relevant prior-art however do not expressly disclose "a representation of fat metabolism comprises a representation of at least one biological process selected from the group consisting of regulation of adipose tissue uptake of free fatty acid, regulation of adipose tissue lipolysis, regulation of adipose tissue triglyceride esterification, hepatic lipoprotein regulation, muscle free fatty acid uptake, and muscle free fatty acid utilization; and a representation of protein metabolism comprises a representation of at least one biological process selected from the group consisting of production of amino acids from carbohydrate in muscle, hepatic gluconeogenesis from amino acid substrate, oxidation of amino acids in muscle, oxidation of amino acids in liver; and regulation of skeletal muscle protein turnover in response to a stimulus selected from activity, exercise, fat mass, dietary composition, and insulin; producing a simulated biological attribute associated with at least one biological attribute of diabetes based on the combined plurality of biological processes" (emphasis added).

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5.2 As per independent claims 25 and 27 and their respective dependent claims, the most relevant prior-art however do not expressly disclose "combining the plurality of biological processes to form a simulation of at least one biological attribute of diabetes, wherein the simulation comprises a representation of fat metabolism, wherein the representation of fat metabolism comprises a representation of at least one biological process selected from the group consisting of regulation of adipose tissue uptake of free fatty acid, regulation of adipose tissue lipolysis, regulation of adipose tissue triglyceride esterification, hepatic lipoprotein regulation, muscle free fatty acid uptake, and muscle free fatty acid utilization; producing a simulated biological attribute associated with at least one biological attribute of diabetes based on the combined plurality of biological processes" (emphasis added).

- 5.3 As per independent claims 26 and 28 and their respective dependent claims, the most relevant priorart however do not expressly disclose "simulation of at least one biological attribute of diabetes, wherein the simulation comprises a representation of protein metabolism, wherein the representation of protein metabolism comprises a representation of at least one biological process selected from the group consisting of production of amino acids from carbohydrate in muscle, hepatic gluconeogenesis from amino acid substrate, oxidation of amino acids in muscle, oxidation of amino acids in liver, and regulation of skeletal muscle protein turnover in response to a stimulus selected from activity, exercise, fat mass, dietary composition, and insulin"
- 6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

7. All claims allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Silver whose telephone number is (571) 272-8634. The examiner can normally be reached on Monday thru Friday, 10am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Silver Patent Examiner Art Unit 2128

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